REMARKS

Claims 1 to 21 and 35 to 51 are currently pending in the application. Original claims 1-60 were subjected to a Restriction Requirement by Examiner. Applicants elected Group I. Claims 1 to 21 and 35 to 51 were rejected by Examiner under 35 U.S.C. § 112, second paragraph as being indefinite, and under 35 U.S.C. §§ 102(b) and 103(a). Applicants have amended claims 1, 15, 20, 21, 35, 50 and 51. Applicants have cancelled claims 20 to 34, 45, 46 and 52 to 60. Applicants have added new claims 61 to 82.

Amendments

Applicants have amended claims 1, 15, 20, 21, 35, 50 and 51 to insert proper Markush language as pointed out by Examiner. Applicants have also amended claim 1 to insert "," after "aromatic acids" as suggested by Examiner. These amendments merely place the claim language into proper format and do not narrow the scope of the claim.

Applicants have further amended claims 1, 15 and 35 to indicate that the synthetic hydrotalcites recited in the claims are produced by first reacting the trivalent cation M^{3+} with the organic anion A^{n-} to produce an intermediate, then reacting the intermediate with the divalent cation M^{2+}. This amendment is supported *inter alia* in the specification at paragraphs 14, 18, 19 and 23.

Applicants have added new claims 61 to 82, which encompass the subject matter of cancelled claims 45 and 46.

Applicants have cancelled claims 22 to 34 and 52 to 60 as drawn to a non-elected invention.

Applicants have cancelled claims 45 and 46 in favor of new claims 61 to 82, which cover the same subject matter.

Response to Restriction Requirement

Examiner subjected claims 1 to 60 to a three way Restriction Requirement. Applicants elect to prosecute the invention of Group I, claims 1 to 21 and 35 to 51. Applicants have cancelled claims 22 to 34 and 52 to 60 as drawn to non-elected inventions, but reserve the right to file divisional applications with the currently non-elected claims.

Rejection Under 35 U.S.C. § 112, second paragraph

Claims 1 to 21 and 35 to 51 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite.

Examiner asserts that claims 1 to 21 and 35 to 51 are indefinite absent definitions or values for x and n. Applicants respectfully traverse this rejection.

When examining a claim for definiteness, one must view the claim from the perspective of one of ordinary skill in the art. "The definiteness inquiry focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification." *Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 1625, 57 USPQ2d 1293 (Fed. Cir. 2001). Further, when performing an analysis of a claim for compliance with the second paragraph of 35 U.S.C. § 112, the analysis must not be performed in a vacuum, but rather in light of: (A) the content of the particular application disclosure; (B) the teachings of the prior art; and (C) the claim interpretation that would be given by one possessing ordinary skill in the art at the time the invention was made. M.P.E.P. § 2173.01.

Applicants respectfully submit that one of ordinary skill would understand the scope of Claims 1 to 21 and 35 to 51 and the formula recited therein based on the written description and the knowledge generally available in the art. For example, U.S. Patent 5,399,329 to Schutz et al, which is incorporated by reference into the instant application, indicates that hydrotalcites having the general formula $[M^{II}_{1-x}M^{III}_{x}](OH)_2 \cdot x/yA^{y-} \cdot MH_2O$ are

well known and widely reported in the literature. Schutz et al, col. 1, lns. 23 to 63. The literature article "Fatty Acids In layered Metal Hydroxides: Membrane-like Structure and Dynamics", Marlon Borja and Prabir K. Dutta, *J. Phys. Chem.* 1992, *96*, 5434, (Borja) also discloses the general formula for layered metal hydroxides as $[M^{II}_{1-x}M^{III}_{x}(OH)_2]\cdot A_{x/y}^{y-}\cdot zH_2O$. In addition, U.S. Patent 5,728,366 to Martin et al provides a general formula defining hydrotalcites: $Mg_{1-x}Al_x(OH)_2(CO_3)_{x/2}\cdot m\ H_2O$, where CO_3 is carbonate, which has a valence of 2-. Therefore, the general formula disclosed in the instant application for hydrotalcites would be easily recognized and understood by one of ordinary skill in the art.

To address the specific points of Examiner, Applicants respectfully submit that the acceptable values for both x and n would be understood by one of ordinary skill in the art. With respect to values for x, Borja discloses that hydrotalcites are derived from $Mg(OH)_2$, wherein a fraction of the divalent magnesium is replaced by a trivalent metal, aluminum for instance. The content of trivalent metal imparts a partial positive charge to the composition, which must be balanced by the presence of an anion. See Borja, p. 5434. Based on this knowledge and the formula recited in the instant claims, it is clear that x must be a positive fractional number. The operator x equals the fractional content of trivalent metal and hence the fractional charge imparted to the composition. Likewise, 1-x is the fractional content of divalent metal. Therefore, x must be greater than zero and less than one for the formula to both make sense and define a hydrotalcite.

Applicants respectfully submit that the range of greater than zero and less than one is closed ended and definite. Applicants respectfully submit that the fact that Schutz et al and Martin et al define a narrow range for values of x does not render the instant claims indefinite. M.P.E.P. § 2173.04 states that "[b]readth of a claim should not be equated with indefiniteness." *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Reconsideration is respectfully requested.

With respect to values for n, it is equally clear that n is the valence number of the balancing anion, a whole positive number. This is specifically defined in Martin et al. In the case of a mono acid carboxylate n would be 1. Hence, the fraction x/n provides that fractional content of anion needed to balance the fractional positive charge of the composition. Reconsideration is respectfully requested.

Examiner also asserts that the improper Markush language present in claims 1, 15, 20, 21, 35, 50 and 51 renders those claims indefinite. Applicants have corrected the improper Markush language. Reconsideration is respectfully requested.

Examiner also asserts that dependent claims 45 and 46 are confusing since polystyrene and polyvinylchloride are not polyolefins. Applicants have cancelled dependent claims 45 and 46 and introduced new claims 61 to 82, which encompass the subject matter of the cancelled claims. Applicants respectfully submit that this moots Examiner's rejections of claims 45 and 46.

Rejection Under 35 U.S.C. § 102(b)

Examiner rejected Claims 1 to 8, 10, 11, 13, 15, 20, 21, 35 to 38, 44 and 47 to 51 as anticipated by one or more of U.S. Patent 4,774,212 ("Drezdon"), the Solid State Ionics Article ("Carlino"), the Journal of Physical Chemistry Article ("Borja"), U.S. Patent 5,399,329 ("Schutz et al"), U.S. Patent 5,728,366 ("Martin et al") and U.S. Patent 5,977,218 ("Bonora"). Claims 1, 15 and 35 are the independent claims. Applicants have amended Claims 1, 15 and 35.

M.P.E.P. § 2131 states that, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claims 1 to 8, 10, 11 and 13

All of Drezdon, Carlino, Borja, Schutz, Martin and Bonora were applied to Claims 1 to 3. Additionally, Carlino was applied to Claims 8 and 10; Borja was applied to Claim 6; Schutz was applied to claim 4; Martin was applied to Claims 4 to 8, 10, 11 and 13; and Bonora was applied to Claim 8. Claim 1 is the independent claim in this set. Applicants respectfully submit that the amendment to Claim 1 overcomes all of these rejections.

As amended Claim 1 recites a synthetic hydrotalcite having the general formula: $[M^{2+}_{1-x}M^{3+}_{x}(OH)_2]^{x+}[A^{n-}_{x/n}\cdot mH_2O]^{x-}$, wherein M^{2+} is a divalent cation, M^{3+} is a trivalent cation and A^{n-} is at least one organic anion. The at least one organic anion is selected from the group consisting of straight chain carboxylates of C_5-C_{18} acids, carboxylates of aromatic acids, carboxylates of acrylic acid, unsaturated carboxylates of methacrylic acid and unsaturated carboxylates of vinylacetic acid. The synthetic hydrotalcite is produced by reacting the trivalent cation, M^{3+} with the at least one organic anion, A^{n-} to produce an intermediate. The intermediate is then reacted with the divalent cation, M^{2+} in water to produce the synthetic hydrotalcite.

The intermediate is formed alternatively by 1) extended reaction of the trivalent cation and organic anion in aqueous solution, 2) reaction of the trivalent cation and organic anion in organic solution, or 3) reaction of the trivalent cation with a melt of the organic anion. See specification at ¶ 19. As indicated in paragraph 19 of the specification, completion of the first step, the formation of the intermediate reaction product of the trivalent cation and organic anion, is key to the successful synthesis of the novel hydrotalcites of Claim 1.

Drezdon discloses anion intercalated hydrotalcites wherein the hydrotalcites are intercalated with an anion selected from the group consisting of lauryl sulfate, p-toluene sulfonate, terephthalate, 2,5-dihydroxy-1,4-benzene disulfonate, 1,5-naphthalenedisulfonate and a polyoxometallate. See Drezdon col. 2, lns. 34-54. The intercalated hydrotalcites disclosed by Drezdon are produced by combining a magnesium salt, an aluminum salt and

the intercalating anion in aqueous solution. Alternatively, the magnesium and aluminum salts are combined in solution and added to a solution of the intercalating anion drop-wise.

The process disclosed by Drezdon is therefore distinctly different from that recited in Claim 1, which involves first producing an intermediate by reacting a trivalent cation with an organic anion, and then reacting the intermediate with a divalent cation. Therefore, the Drezdon process does not disclose the key intermediate step for intercalation with longer chain length carboxylic acids, aromatic carboxylic acids and unsaturated carboxylic acids necessary for the successful synthesis of the compositions recited in Claim 1. Applicants therefore respectfully submit that Claim 1 cannot be anticipated by Drezdon. Further, since Claims 2 and 3 depend from Claim 1, Applicants respectfully submit that these claims also cannot be anticipated by Drezdon. Reconsideration is respectfully requested.

Carlino is a literature review of intercalation of hydrotalcites with organic anions. In its review, Carlino discloses hydrotalcites that have been intercalated with aromatic carboxylic acids and longer chain unsaturated carboxylic acids. Carlino discloses several methods of producing intercalated hydrotalcites. Two of the methods involve simply adding either the hydrotalcite or its calcined derivative to a solution of the intercalating organic anion and optionally shaking or agitating the solution. Carlino also discloses the co-precipitation method disclosed by Drezdon. Carlino also discloses mixing either the hydrotalcite or its calcined derivative with a melt of the intercalating organic anion, followed by washing with hot ethanol and storage in a desiccator. Finally, Carlino discloses a method of glycerol aided intercalation, again using either the hydrotalcite or its calcined derivative.

None of the methods disclosed by Carlino involve the production of an intermediate by reacting a trivalent cation with an organic anion, and then reacting the intermediate with a divalent cation. Therefore, like Drezdon, the methods disclosed by Carlino do not describe the key intermediate step for intercalation with longer chain length carboxylic acids, aromatic

carboxylic acids and unsaturated carboxylic acids necessary for the successful synthesis of the compositions recited in Claim 1. Applicants therefore respectfully submit that Claim 1 cannot be anticipated by Carlino. Further, since Claims 2, 3, 8 and 10 depend from Claim 1, Applicants respectfully submit that these claims also cannot be anticipated by Carlino. Reconsideration is respectfully requested.

Borja discloses the intercalation of hydrotalcites with long chain fatty acids of the formula $CH_3(CH_2)_nCOOH$, where n = 10, 12 or 14. The intercalated hydrotalcites disclosed by Borja are produced by first producing and isolating the hydrotalcite material, then reacting the hydrotalcite with the acid in refluxing ethanol. This method does not involve first producing an intermediate by reacting a trivalent cation with an organic anion, and then reacting the intermediate with a divalent cation. Therefore, the method disclosed by Borja does not teach the key intermediate step for intercalation with longer chain length carboxylic acids, aromatic carboxylic acids and unsaturated carboxylic acids necessary for the successful synthesis of the compositions recited in Claim 1. Applicants therefore respectfully submit that Claim 1 cannot be anticipated by Borja. Further, since Claims 2, 3 and 6 depend from Claim 1, Applicants respectfully submit that these claims also cannot be anticipated by Borja. Reconsideration is respectfully requested.

Schutz et al discloses synthetic hydrotalcites that are intercalated with organic acid carboxylates of the formula $RCOO^-$, where R has the formula C_nH_{2n+1} and n = 0 to 5. The intercalated hydrotalcites of Schutz et al are produced by reacting an aluminum (trivalent cation) source with a water soluble carboxylic acid at elevated temperature for 0.5 hr in water, and then adding magnesium (divalent cation) to the same reaction mixture and continuing to react for an additional several hours. Although Schutz et al states that the hydrotalcites it discloses are intercalated with carboxylates having up to 6 carbons total, no example is provided for a carboxylate having more than 4 carbon atoms total. See Schutz

Example 2. Further, Schutz et al states explicitly that "[i]t is clear from the present invention that the presence of a water soluble mono carboxylic anion is the key in the synthesis of sheet hydrotalcite." See Schutz et al, col. 5, lns. 1-3. This clearly indicates that Schutz et al does not contemplate producing intercalated hydrotalcites with longer chain carboxylic acids (C_5 and higher), aromatic carboxylic acids and unsaturated carboxylic acids as recited in Claim 1. In fact, Schutz et al teaches against using these non-water soluble organic acids. Applicants therefore respectfully submit that Claim 1 cannot be anticipated by Schutz et al. Further, since Claims 2 to 4 depend from Claim 1, Applicants respectfully submit that these claims also cannot be anticipated by Schutz et al. Reconsideration is respectfully requested.

Martin et al discloses a method for making an organic anion intercalated hydrotalcite-like material. The method disclosed by Martin et al involves first reacting magnesium (divalent cation) with aluminum (trivalent cation) "in a carboxylic acid-free, aqueous suspension to form a meixnerite intermediate." See Martin et al, col. 2, lns. 32-35. The intermediate is then contacted with a monovalent organic anion to form a hydrotalcite like material. Here again, the disclosed process does not involve first producing an intermediate by reacting a trivalent cation with an organic anion, and then reacting the intermediate with a divalent cation. In fact, Martin et al explicitly states that the first step of producing an intermediate is "carboxylic acid-free." If anything, Martin et al teaches against first reacting a trivalent cation with an organic anion.

Therefore, the method disclosed by Martin et al does not teach the key intermediate step for intercalation with longer chain length carboxylic acids, aromatic carboxylic acids and unsaturated carboxylic acids necessary for the successful synthesis of the compositions recited in Claim 1. Applicants therefore respectfully submit that Claim 1 cannot be anticipated by Martin et al. Further, since Claims 2 to 8, 10 and 13 depend from Claim 1,

Applicants respectfully submit that these claims also cannot be anticipated by Martin et al. Reconsideration is respectfully requested.

Bonora discloses stabilized polyolefin and polyolefin copolymers. Bonora further discloses that organic anion intercalated hydrotalcites may also be used as additives in the polyolefin compositions it discloses. However, Bonora does not disclose any process for preparing the hydrotalcites that it discloses as being useful. Therefore, Bonora does not disclose every element recited in Claim 1. Applicants therefore respectfully submit that Claim 1 cannot be anticipated by Bonora. Further, since Claims 2, 3 and 8 depend from Claim 1, Applicants respectfully submit that these claims also cannot be anticipated by Bonora. Reconsideration is respectfully requested.

Of the references cited by Examiner, none of Drezdon, Carlino, Borja, Martin et al and Bonora disclose a process as recited in the product-by-process Claim 1. Therefore, none of these references disclose every element recited in Claim 1. The process disclosed in Schutz et al, although similar to the process recited in Claim 1, is ineffective for water insoluble longer chain length acids, aromatic acids and unsaturated acids. Therefore, Schutz et al does not disclose every element of Claim 1. Applicants respectfully submit that Claims 1 to 8, 10, 11 and 13 cannot be anticipated by any of these references.

Claims 15, 20 and 21

Both of Schutz et al and Martin et al are applied to Claims 15, 20 and 21. Claim 15 is the independent claim in this set. Applicants respectfully submit that the amendment to Claim 15 overcomes all of these rejections.

As amended, Claim 15 recites a synthetic hydrotalcite having the general formula: $[M^{2+}_{1-x}M^{3+}_{x}(OH)_2]^{x+}[A^{n-}_{x/n}\cdot mH_2O]^{x-}$, wherein M^{2+} is a divalent cation, M^{3+} is a trivalent cation and A^{n-} is an anion. The anion comprises a mixture of at least two members selected from the group consisting of straight chain saturated carboxylates of C_2-C_4 acids, straight

chain saturated carboxylates of C_5-C_{18} acids, carboxylates of aromatic acids, unsaturated carboxylates of acrylic acid, unsaturated carboxylates of methacrylate acid and unsaturated carboxylates of vinylacetic acid. The synthetic hydrotalcite is produced by reacting the trivalent cation, M^{3+} with the anion, A^{n-} to produce an intermediate, and then reacting the intermediate with said divalent cation, M^{2+} in water to produce the synthetic hydrotalcite.

Both Schutz et al and Martin et al have been discussed in detail above. Applicants respectfully submit that for the same reasons cited with respect to amended Claim 1, Martin et al cannot anticipate Claim 15. Further, Claim 15 recites explicitly that the claimed synthetic hydrotalcite comprises *at least two* members selected from the recited Markush group. Neither of Schutz et al or Martin et al teach mixtures of intercalating organic anions in the same hydrotalcite. For this reason and the reasons stated above, Applicants respectfully submit that Claim 15 cannot be anticipated by either of Schutz et al or Martin et al. Further, since Claims 20 and 21 depend from Claim 15, Applicants respectfully submit that these claims cannot be anticipated by either of Schutz et al or Martin et al. Reconsideration is respectfully requested.

Claims 35 to 38, 44 and 47 to 51

Bonora was applied to Claims 35 to 38, 44 and 47 to 51. Claim 35 is the independent claim in this set. Claim 35 has been amended. Applicants respectfully submit that the amendment to Claim 35 overcomes all of these rejections.

As amended, Claim 35 recites a synthetic hydrotalcite-polyolefin blend comprising a polyolefin and a synthetic hydrotalcite having the general formula $[M^{2+}_{1-x}M^{3+}_{x}(OH)_2]^{x+}[A^{n-}_{x/n}\cdot mH_2O]^{x-}$, wherein M^{2+} is a divalent cation, M^{3+} is a trivalent cation and A^{n-} an organic anion source selected from the group consisting of straight chain carboxylates of C_5-C_{18} acids, carboxylates of aromatic acids, carboxylates of acrylic acid, unsaturated carboxylates of methacrylic acid and unsaturated carboxylates of vinylacetic

acid. The synthetic hydrotalcite is produced by reacting a trivalent cation, M^{3+} with an anion, A^{n-} to produce an intermediate, and then reacting the intermediate with a divalent cation, M^{2+} in water to produce the synthetic hydrotalcite.

Bonora has been discussed in detail above. Bonora contains absolutely no description of the process used to produce the hydrotalcites used in the polyolefin blends it discloses. On that basis, Applicants respectfully submit that Bonora does not disclose all of the elements recited in Claim 35. Therefore, Applicants respectfully submit that Claim 35 cannot be anticipated by Bonora. Further, since Claims 36 to 38, 44 and 47 to 51 depend from Claim 35, Applicants respectfully submit that these claims cannot be anticipated by Bonora. Reconsideration is respectfully requested.

Rejection Under 35 U.S.C. § 103(a)

Examiner rejected Claims 1 to 13, 15 to 21 and 35 to 51 as obvious over one or more of Schutz et al, Martin et al, Bonora or U.S. Patent 6,313,208 ("Nosu et al") either alone or in combination. Applicants have amended Claims 1, 15 and 35.

M.P.E.P. § 2143 states that in order to establish a prima facie case of obviousness three basic criteria must be met. First there must be some suggestion or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference(s) must teach all of the claim limitations. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the in the prior art, not in the applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

Claims 1 to 13

Schutz et al alone was applied to claims 1 to 4. Martin et al was applied to claims 1 to 13 both alone and in combination with Bonora. The combination of Bonora and Nosu et al was applied to Claims 1 to 3 and 8. Claim 1 is the independent claim. Applicants respectfully submit that the amendment to Claim 1 overcomes all of these rejections.

Amended Claim 1 was discussed above in detail.

Schutz et al claim to disclose a process for production of organic anion intercalated hydrotalcites wherein the intercalating anions are acid carboxylates of the formula $RCOO^-$, where R as the formula C_nH_{2n+1} and n = 0 to 5. The intercalated hydrotalcites of Schutz et al are produced by reacting an aluminum (trivalent cation) source with a water soluble carboxylic acid at elevated temperature for 0.5 hr in water, and then adding magnesium (divalent cation) to the same reaction mixture and continuing to react for an additional several hours. Although Schutz et al states that the hydrotalcites it discloses are intercalated with carboxylates having up to 6 carbons total, no example is provided for a carboxylate having more than 4 carbon atoms total. See Schutz Example 2. Further, Schutz et al states explicitly that "[i]t is clear from the present invention that the presence of a water soluble mono carboxylic anion is the key in the synthesis of sheet hydrotalcite." See Schutz et al, col. 5, lns. 1-3.

Since Schutz et al teaches that the presence of a water soluble mono carboxylic acid is key, there is no motivation in Schutz et al that would lead one of ordinary skill in the art to modify the process in Schutz et al to use water insoluble longer chain carboxylic acids (C_5 and higher), aromatic carboxylic acids and unsaturated carboxylic acids as recited in Claim 1. Further, based on the disclosure of Schutz et al, one of ordinary skill in the art would not have a reasonable expectation of success in making the modification since Schutz et al explicitly states that water soluble mono carboxylic acids are key.

For these reasons, Applicants respectfully submit that Claim 1 cannot be obvious over Schutz et al. Further, since Claims 2 to 4 depend from Claim 1, Applicants respectfully submit that these claims cannot be obvious over Schutz et al alone or in combination with another reference. Reconsideration is respectfully requested.

Martin et al discloses a process for producing an acid carboxylate intercalated wherein magnesium (divalent cation) and aluminum (trivalent cation) are first reacted in a carboxylic acid-free aqueous solution. The goal of the first step of the Martin et al process is to produce a meixnerite intermediate. As stated above, this process does not include the key step for producing the compositions of product-by-process Claim 1.

Further, modifying the process in Martin et al to obtain the product-by-process composition in Claim would defeat the purpose of the Martin et al process to produce a meixnerite intermediate. M.P.E.P. § 2143.01 states that, "[i]f the proposed modification of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims *prima facie* obvious." *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Therefore, Applicants respectfully submit that Claim 1 cannot be obvious over Martin et al. Further, since Claims 2 to 13 depend from Claim 1, these claims also cannot be obvious over Martin et al. Reconsideration is respectfully requested.

Bonora was discussed above in detail. Bonora does not discuss a process for producing intercalated synthetic hydrotalcites. Therefore, Bonora does not cure the fundamental deficiency of Martin et al. Applicants therefore respectfully submit that Claim 1 cannot be obvious over the combination of Martin et al and Bonora. Further, since Claims 2 to 13 depend from Claim 1, these claims also cannot be obvious over the combination of Martin et al and Bonora. Reconsideration is respectfully requested.

Nosu et al discloses a polyolefin blend comprising 100 parts of a synthetic resin and 0.001 to 10 parts of a hydrotalcite of the formula $\{(Mg)_y(Zn)_z\}_{1-x}(Al)_x(OH)_2(A^{n-})_{x/n}\cdot mH_2O$. The anion A^{n-} is exemplified by the inorganics ClO_4^-, SO_4^{2-} and CO_3^{2-}. Nosu et al discusses surface treatment of the hydrotalcites with fatty acids, surfactants, phosphates and coupling agents by either dry or wet blending. However, Nosu et al does not discuss intercalation with organic acid carboxylates and the reference examples provided by Nosu et al do not indicate intercalation with organic acid carboxylates. Nosu et al, col. 9, ln. 26 to col. 14, ln. 13. In any case, Nosu et al does not disclose the product-by-process of Claim 1. Therefore, Nosu et al does not cure the fundamental deficiency of Bonora. Applicants therefore respectfully submit that Claim 1 cannot be obvious over the combination of Bonora and Nosu et al. Further, since Claims 2, 3 and 8 depend from Claim 1, these claims also cannot be obvious over the combination of Bonora and Nosu et al. Reconsideration is respectfully requested.

Claims 15 to 21

Schutz et al was applied to Claims 15, 20 and 21. Martin et al was applied to all of Claims 15 to 21. The combination of Martin et al and Bonora was applied to Claims 15 to 21. Claim 15 is the independent claim. Applicants respectfully submit that the amendment to Claim 15 overcomes all of these rejections.

Amended Claim 15 was discussed in detail above.

Schutz et al, Martin et al and the combination of Martin et al and Bonora were also discussed in detail above. Applicants respectfully submit that for the same reasons cited with respect to Claim 1, the combination of Martin et al and Bonora cannot render Claim 15 obvious. Further, neither of Schutz et al or the combination of Martin et al and Bonora teach or suggest mixtures of two or more intercalating organic acid carboxylates.

Applicants respectfully submit that Claim 15 as amended is not obvious over Schutz et al or the combination of Martin et al and Bonora. Further, since all of Claims 16 to 21 depend from Claim 15, Applicants respectfully submit that none of these claims can be obvious over Schutz et al or the combination of Martin et al and Bonora. Reconsideration is respectfully requested.

Claims 35 to 51

The combination of Martin et al and Bonora was applied to Claims 35 to 44 and 47 to 51. The combination of Bonora and Nosu et al was applied to Claims 35 to 38 and 44 to 51. Claim 35 is the independent claim. Applicants have cancelled Claims 45 and 46. Applicants respectfully submit that the amendment to Claim 35 overcomes all of these rejections.

Claim 35 was discussed in detail above.

Martin et al, Bonora, Nosu et al and their combinations were also discussed above. Applicants respectfully submit that for the same reasons cited with respect to Claims 1 and 15, neither the combination of Martin et al and Bonora, nor the combination of Bonora and

Nosu et al can render Claim 35 obvious. Further, since all of Claims 36 to 44 and 47 to 51 depend from Claim 35, Applicants respectfully submit that none of these claims can be obvious over either the combination of Martin et al and Bonora or the combination of Bonora and Nosu et al. Reconsideration is respectfully requested.

CONCLUSION

Applicants believe that the foregoing amendments and remarks have overcome or rendered moot all grounds for rejection or objection. There being no other rejections or objections, Applicants believe that the application is in a condition for allowance. Applicants therefore respectfully request prompt action on the claims and allowance of the application. If the Examiner believes that personal communication will expedite prosecution of the application, the Examiner is invited to telephone Applicants' undersigned agent directly.

AUTHORIZATION

Applicants believe that no extension of time is required to make submission of this response timely. However, in the event that an extension of time is required, Applicants hereby submit a petition for such extension of time as may be necessary to make this response timely. The Commissioner is hereby authorized to charge the necessary fees to deposit account No. 502194. A duplicate of this authorization is enclosed.

Respectfully Submitted,
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